

What is claimed as new and desired to be protected by Letters  
Patent of the United States is:

1. A method for deploying a fiber optic communication network  
5 comprising:  
storing an attribute of an optical communication component in a  
catalog database entry;  
associating said catalog database entry with a design profile;  
selecting said database entry from said design profile;  
10 reading said attribute from said database entry; and  
associating said attribute with a planned deployment of a physical  
instance of said component.
2. A method as defined in claim 1, further comprising iterating said  
15 associating step a plurality of times, and further associating said attribute  
of a component of a first iteration with said attribute of a component of a  
second iteration.
3. A method as defined in claim 1, further comprising recording said  
20 association in a computer memory.

4. A method as defined in the claim 1, further comprising physically  
deploying said physical instance of said component.

5. A method as defined in claim 1 further comprising identifying a  
5 geographic location for said planned deployment .

6. A method as defined in claim 5 further comprising providing a  
graphical representation of said geographic location and said physical  
instance .

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7. A method as defined in claim 5 wherein said optical communication  
component comprises a component selected from the group of an optical  
cable, an optical cable connector, a splitter, an optical amplifier, an optical  
repeater, an optical transmitter, an optical splice enclosure, a patch panel,  
15 and a splice tray.

8. A method as defined in claim 1 wherein said optical communication  
component comprises an optical cable, said optical cable comprising a  
cable selected from the group of ribbon cable, loose tube buffer cable ,  
20 central tube cable, odd count fiber cable , single mode fiber cable ,  
multimode fiber cable , and cable including a plurality of fiber types .

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9. A method as defined in claim 8 wherein said optical cable includes a plurality of optical fibers said plurality comprising a number of fibers between about one fiber and about 2600 fibers.

5 10. A method as defined in claim 1 wherein said planned deployment includes identification of said instance with an owner.

10 11. A method as defined in claim 1 wherein said planned deployment includes identification of said instance with a communication circuit.

12. A method as defined in claim 1 wherein said planned deployment includes deploying a plurality of optical communication components

13 . A system for planning a network comprising:  
15 a first computer including a first memory storage device having application software encoded therein;

a second computer, operatively connected to said first computer, having a second memory storage device adapted to record first project data;

20 a third computer, operatively connected to said second computer, having a third memory storage device adapted to record second project

data, said first and second project data being substantially instantaneously identical;

said software including a catalog portion, a design profile portion, and a calculations portion;

5           said catalog portion being adapted to receive data defining a plurality of communication network components;

said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network; and

10           said first data including a logical model of a communications network;

said calculations portion being adapted to calculate power and signal relationships within said communications network.

14. A system as defined in claim 13, wherein said communications  
15   network comprises an optical fiber portion.

15. A system as defined in claim 14, wherein said optical fiber portion comprises an optical cable having a buffer with first and second optical fibers;

20           said optical fibers having different nominal characteristics.

16. A system as defined in claim 13, wherein said communications network comprises a wireless communication portion.

17. A system as defined in claim 13, wherein said software further  
5 comprises a detail notes portion adapted to record detailed layout of a network within a multiple dwelling unit.

18. A system for planning a network comprising:  
a computer including a memory storage device having application  
10 software encoded therein;  
said software including a catalog portion, a design profile portion,  
a project storage portion, and a calculations portion;  
said catalog portion adapted to receive data defining a plurality of  
communication network components;  
15 said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network;  
said project storage portion adapted to receive data including a logical model of a communications network;  
said calculations portion adapted to calculate power and signal  
20 relationships within said communications network;  
said communications network including an optical fiber portion.

19. A system for planning a network comprising:

a computer including a memory storage device having application software encoded therein;

said software including a catalog portion, a design profile portion,

5 a project storage portion, and a calculations portion;

said catalog portion adapted to receive data defining a plurality of communication network components;

said design profile portion adapted to receive data defining a plurality of design rules related to logical design of a network;

10 said project storage portion adapted to receive data including a logical model of a communications network;

said calculations portion adapted to calculate power and signal relationships within said communications network;

said communications network including an optical fiber portion;

15 and

one of said communication network components including an optical cable having a buffer with first and second optical fibers, said optical fibers having different nominal characteristics.

20 20. A system for planning a network comprising:

a computer including a memory storage device having application software encoded therein;

said software including a catalog portion, a design profile portion,  
a project storage portion, and a calculations portion;

said catalog portion adapted to receive data defining a plurality of  
communication network components;

5           said design profile portion adapted to receive data defining a  
plurality of design rules related to logical design of a network;

said project storage portion adapted to receive data including a  
logical model of a communications network;

10           said calculations portion adapted to calculate power and signal  
relationships within said communications network;

said communications network including a wireless communication  
portion; and

one of said communication network components including an  
antenna adapted to radiate radio frequency signals.

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21. A method of deploying a communications network comprising:

providing first and second computers including first and second  
memory storage devices respectively, each having application software  
encoded therewithin;

20           operatively connecting said first and second computers through a  
communications link;

including a logical model of a communications network within said first storage device, said model including first and second logical communication cables, said model depicting operative connection of said first and second cables;

- 5 receiving said logical model through said link into said second computer memory device;
- representing said logical model graphically; and
- operatively connecting first and a second physical communication cables according to said model.

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22 . A method as defined in claim 21 further comprising the step of transmitting a notice of completion of said operative connection of physical cables through said link into said first computer.

- 15 23. A method as defined in claim 21 further comprising the step of modifying said graphically represented logical model;

transmitting said modified logical model to said first computer and subsequently receiving authorization for said operatively connecting first and second physical communication cables.

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24. A method as defined in claim 21, wherein said method further comprises:

characterizing the signal strength of a radio frequency signal as a function of geographic location; and

using said characterization to locate a radio frequency antenna.

5 25. A method of deploying a communications network comprising:

providing first and second computers including first and second memory storage devices respectively, each having application software encoded therewithin, said second computer being a portable computer;

operatively connecting said first and second computers through a  
10 communications link;

including a logical model of a communications network within said first storage device, said model including first and second logical communication cables, said model depicting operative connection of said first and second cables;

15 receiving said logical model through said link into said second computer memory device;

representing said logical model graphically; and

operatively connecting first and second physical communication cables according to said model.

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26. A method as defined in claim 25 wherein said portable computer comprises a laptop computer.

27. A method of modeling a fiber optic communication network

comprising:

- 5           defining a land base map;  
            defining a first plurality of optical network components including a  
second plurality of optical cable segments;  
            associating each component of said first plurality with a location of  
said land base;
- 10          associating each component of said first plurality with at least one  
other component of said first plurality;  
            calculating signal loss through at least one segment of said second  
plurality; and  
            displaying said land base map and said signal loss calculation result.

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